In the claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1-10. (canceled).

11. (currently amended) The automated method of claim 19 determining the initial delay values based on ~~wherein the preferred~~ gain considerations of the cells including ~~is determined~~ using a continuous buffering assumption.

12. (previously presented) The automated method of claim 19 wherein said initial delay values are determined during library analysis.

13-18. (canceled).

19. (currently amended) An automated method for designing an integrated circuit layout with a computer, comprising:

selecting cells from a cell library to implement a circuit path;

prior to assignment of wire loads based on an initial placement of the circuit path, determining initial delay values for the selected cells ~~based on corresponding preferred gains of the selected cells~~;

prior to the assignment of wire loads based on the initial placement of the circuit path, determining an adjusted initial delay value for at least one of the selected cells by performing at least one of:

compressing the initial delay value of at least one of the selected cells to meet delay constraints for the circuit path, and

stretching the initial delay value of at least one of the selected cells to reduce slack in the circuit path;

performing [[a]] the initial placement of the selected cells for the circuit path, ~~including assigning~~ and the assignment of wire loads to the selected cells based on the initial placement;

adjusting size or area of one or more of the selected cells during or after the initial placement ~~in response to the assigned wire loads~~, to maintain the initial delay value or the adjusted initial delay value for the corresponding selected cells; and

routing the selected cells for the circuit path.

20. (currently amended) The automated method of claim 19, including prior to the initial placement, inserting a buffer in the circuit path when there is available slack in the circuit path.

21. (currently amended) The automated method of claim 20, including prior to the initial placement, determining net weight values for the selected cells, the net weight values representing sensitivity of total area of a circuit design to load on the corresponding cell, and determining whether to insert a buffer on the output of a given cell in the selected cells using the net weight value of the given cell.

22. (new) An automated method for designing an integrated circuit layout with a computer, comprising:

selecting cells from a cell library to implement a circuit path;

prior to assignment of wire loads based on an initial placement of the circuit path, determining initial delay values for the selected cells;

prior to the assignment of wire loads based on the initial placement of the circuit path, determining an adjusted initial delay value for at least one of the selected cells by performing at least one of:

compressing the initial delay value of at least one of the selected cells to meet delay constraints for the circuit path, and

stretching the initial delay value of at least one of the selected cells to reduce slack in the circuit path; and

performing the initial placement of the selected cells for the circuit path, and the assignment of wire loads to the selected cells based on the initial placement;

adjusting size or area of one or more of the selected cells during or after the initial placement to maintain the initial delay value or the adjusted initial delay value for the corresponding selected cells;

routing the selected cells for the circuit path; and further including

determining net weight values for the selected cells, the net weight values representing sensitivity of total area of a circuit design to load on the corresponding cell, and prior to placement of the circuit path, determining whether to insert a buffer on the output of a given cell in the selected cells using the net weight value of the given cell, and inserting a buffer in the circuit path when there is available slack in the circuit path.

23. (new) The automated method of claim 19 wherein said initial delay values are determined based on a typical load value determined using gain considerations.

24. (new) The automated method of claim 22 wherein said initial delay values are determined based on a typical load value determined using gain considerations.

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